

# RainSoft®

*Environmental Products for the Home ...since 1953*



# Owner's Manual



This product is manufactured in an ISO 9001:2000 certified facility.

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**Congratulations** on your purchase of a RainSoft Centurion system.

This Owner's Manual is designed to assist with the operation, maintenance, and installation of the system. It is our sincere hope that this manual is clear, concise, and helpful to you as a new owner.

**Questions?** If you have any questions regarding the installation, operation, or servicing of this system, please contact your local RainSoft Dealer. Your local RainSoft Dealer is familiar with your particular water conditions, and is able to address your concerns promptly and efficiently.

## Introduction

- The RainSoft Centurion system provides protection from scale formation throughout the home. The RainSoft Centurion system can be installed at the point of entry to treat your entire home, both hot and cold water, or it can be located directly before a water heater or other device (e.g. sauna, etc) that requires protection from hard water.
- RainSoft Centurion reduces or eliminates scale formation on internal and external plumbing surfaces as well as reducing spotting and streaking normally associated with hard water.
- RainSoft Centurion prevents scale by transforming the normal dissolved hardness minerals into undissolved crystal micro-particles. These crystals stay suspended in the water and have a greatly reduced ability to react and attach to surfaces like dissolved hardness does. Therefore the problem of internal buildup of scale in pipes, water heaters and on fixtures and glass is greatly reduced.
- RainSoft Centurion is not a water softener - Low or phosphate-free cleaning products are recommended to achieve optimum results. Modern surfactant or detergent based, liquid soaps are preferred over old-fashioned caustic solid soaps.

## RainSoft Centurion System Benefits

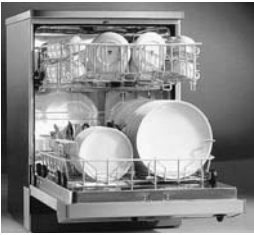
- Chemical Free Scale Prevention. Cost savings and environmental benefits.
- Virtually Maintenance Free. No salt bags or other chemicals to buy, transport and store.
- No Electricity, no wastewater, completely self-contained.
- Beneficial minerals retained for more healthful drinking water.
- Improves the efficiency of water-using appliances.
- Simple installation – no electrical and drain hookup.
- Safe for landscaping and lawn watering. No need for costly bypass plumbing.
- Compatible with all on-site and community wastewater treatment systems.
- Not subject to water softener restrictions and bans.

## ***A note to the homeowner***

Your Centurion system will improve the properties of water throughout your home. Here are some things to expect and some recommendations for maximizing the benefits and your enjoyment of RainSoft Centurion.



**Sinks and fixtures** - should have little or no spotting. If water is allowed to evaporate off a surface, small spots may be left behind. This spotting should not require any more than a wet cloth or sponge to remove. No harsh chemical should be required as with typical hard water spotting.



**Dishwasher-Spotting on dishes and on the surface of the dishwasher should be greatly reduced or eliminated.** We recommend that you immediately reduce the amount of dishwashing detergent by approximately 50% as compared to hard water use. Dishwashing detergents low in phosphates are highly recommended as they are better for the environment and phosphates can cause spotting. In very hard water areas, the use of a rinse aid may be advised.



**Shower doors and tiles- should have little or no spotting.** When water evaporates off a surface, small spots may be left behind. These spots should be easy to remove with a damp cloth or sponge.

**In the bath** you should notice that soaps and shampoos lather more than with un-treated water. Soaps and shampoos will also rinse off much easier and faster than they would with traditional soft water. We recommend the use of modern soaps for the best results.

### **Things to watch for:**

During the first 30-90 days:

- Faucet aerators and drains may plug occasionally as old scale is removed from your plumbing system and water heater.
- You may also see milky water while the descaling is taking place. This is simply an increase in the calcium in the water because RainSoft Centurion is removing old scale deposits from your pipes.

### **Good practices:**

- If your dishwasher is severely coated with scale at the time of installation, we recommend that you purchase a product like Jet-Dry Dishwasher cleaner to accelerate the cleaning. After this initial cleaning RainSoft Centurion should keep it clean.
- We also recommend that you drain your water heater tank. This should be done 30 to 60 days after RainSoft Centurion is installed, and again in one year. This is a good practice that can dramatically increase the life of your water heating appliance. The RainSoft Centurion will help keep the tank and heating elements free of scale and operating at peak efficiency. Please follow the manufacturers instructions when draining the tank!

## Application Limitations

- **Ferrous Iron:** 0.3mg/L Max
- **Manganese:** 0.05mg/L Max
- **Copper:** 1.3mg/L Max

**Iron and Manganese:** Just as with conventional water softening media, RainSoft Centurion needs to be protected from excess levels of certain metals that can easily coat the active surface, reducing its effectiveness over time. Public water supplies rarely, if ever, present a problem, but if the water supply is from a private well confirm that the levels of iron (Fe) and manganese (Mn) are less than 0.3 mg/L and 0.05 mg/L respectively. Copper should be less than 1.3 mg/L.

**Copper:** Copper usually originates from new copper plumbing upstream of the RainSoft Centurion system. If this condition exists, we recommend waiting 3-4 weeks before placing the system in operation. This will allow the copper surfaces to be fully flushed and develop a natural protective surface. To further minimize any problem with excess copper the plumbers should be advised to avoid applying excess flux on the inner surfaces of the pipe and to use a low-corrosivity water soluble flux listed under the ASTM B813 standard. Once the plumbing connections are complete, place the RainSoft Centurion system in bypass prior to following the startup procedure and flush the plumbing for at least 10 minutes.

## Operational Specifications

### Plumbing

3/4" to 1 1/4" inch I.D. (multiple options)

### Water Pressure

15 psi - 100 psi

### Operating Temperatures

40°F – 110°F

### Bypass Valve

The bypass valve enables you to bypass the system in situations of: emergency leaks in the equipment, service calls.

### Existing Plumbing Conditions

Plumbing should be free from lime and/or iron buildup. Piping that contains large amounts of lime and/or iron should be replaced.

### Additional Specifications

- The inlet water should be free of iron and turbidity.
- Do not install this system where water is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

- This system must be installed in accordance with all applicable state and local laws and regulations.
- This system must be installed in an area not affected by extreme heat, cold, or the elements. The selected installation area must be adequate for easy service and accessibility.
- The installation must be on a cold water supply.

### Using RainSoft Centurion with other water treatment equipment

Due to the unique properties of RainSoft Centurion, there are some unique requirements for using RainSoft Centurion in conjunction with filtration or other forms of water treatment.

1. RainSoft Centurion must be the last stage in the treatment chain. Do not install any filters after RainSoft Centurion or before any devices for which scale prevention is required. POU filters, e.g. carbon or RO are exempt from this requirement.
2. Do not apply phosphate or any other antiscalant either before or after RainSoft Centurion.

### Data Chart

Model	Quantity of Media	Max Service Flow Rate
Centurion 8 x 44	3 liters	12 gpm
Centurion 10 x 54	5 liters	20 gpm

## Product Certification Information

Water treatment devices sold to retail consumers in California, accompanied by certain health claims, must be certified by the State of California Department of Public Health. This product is not certified in the State of California for the purpose of making health claims.

## Installation Instructions

### Notes to the Installer:

The RainSoft Centurion system differs from a conventional softener or media filter in a number of key respects.

- The system is light and only partially filled with media. This is normal. The UP-flow operation of the system requires a lot of freeboard to allow the bed to fully fluidize.
- Because the RainSoft Centurion system operates in the UP-Flow mode, the tank connections are opposite of what you're used to.

## 1. Safety Precautions

- To prevent accidents and/or injuries, do not hoist the equipment over your shoulder; use a hand truck.
- Do not lay the system on its side.
- Wear safety glasses and work gloves during installation and service.

## 2. Test the Raw Water

- If water contains iron, manganese or copper more than its application limitations (see page 5), a separate removal system is suggested to be installed prior to the RainSoft Centurion system, consulting with your local dealer.

## 3. Check the Water Pressure

- The minimum water pressure is 15 psi and the maximum water pressure is 100 psi. Use a pressure gauge to confirm that the water pressure does not exceed 100 psi. If the water pressure does exceed this limit, install a pressure regulator on the inlet pipe to the system. Set the pressure regulator at a maximum of 60 psi, which is the optimum operating pressure.

## 4. Locate a Site for the System

- There is only one requirement needed for a site: the main water source. Locate the system as close to the water meter or pressure tank as possible.
- Place the system in the desired location. The location must have a level, smooth, and clean surface.
- If the system is located outdoors, protect the unit from direct sunlight; direct sunlight can damage the fiberglass and other system components. If necessary, build a box or shed.

## 5. Turn Off the Water and Drain the Plumbing

- Turn off the water at the meter or pressure tank.
- Drain all the pipes. Do not sweat pipes with water in them; steam will damage the plastic parts in the valve.
- To drain the plumbing system, open all faucets in the house and flush the toilets. The water will drain out of the lowest faucet or outlet and air will enter the plumbing system.

**! For Massachusetts Residents Only:**  
• The Commonwealth of Massachusetts Plumbing Code 248 CMR shall be adhered to. A licensed plumber shall be used for this installation

**! Important Note:** The system can only be installed outdoors in climates that do not reach freezing levels.

## 6. Install the Pipe Connector (Yoke) to the Bypass Valve

- Connect the raw water pipe to the inlet pipe connection of the yoke. See Figure 1 for the correct direction of flow. The arrow molded into bypass valve will indicate the opposite side direction because it is set up as UP-flow operation.
- Connect the treated water pipe to the outlet pipe connection on the yoke. See Figure 1 for the correct direction of flow. The arrow molded into bypass valve will indicate the opposite side direction because it is set up as UP-flow operation.
- Support all plumbing connected to the yoke; too much weight will cause a leak.
- Do not point the soldering torch directly at the mineral tank or control valve. These composite materials will last a lifetime, but cannot withstand the intense heat from a torch.
- Avoid short connections of pipe between the system outlet and the water heater inlet. If you can't avoid a short connection, move the system to another location. As a last resort, install a heat trap or check valve. If this causes "water hammer", install a "water hammer" suppressor.
- Connect the yoke to the bypass valve .
- Connect the bypass couplers to the QRS head and tighten all screws.

**! Important Note:** Because of UP-flow operation, the correct flow direction is the opposite of the arrows on the bypass valve.

**Helpful Tip:** Water heaters can sometimes transmit heat back down the cold water pipe into the control valve. It may be necessary to install a back-flow prevention device to prevent this from occurring.

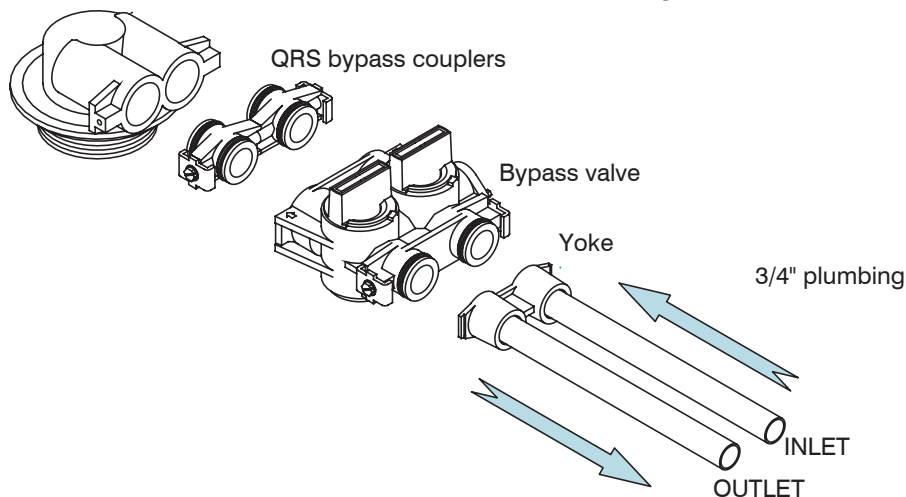
**! Important Note:** The bypass valve is not designed to withstand heat from soldering or twisting from the attached threaded connections.

## 7. Set the Bypass Valve to Bypass

- Move the bypass valve handles to the bypass position (see figure 1). The bypass valve handles should be perpendicular to the pipes.
- Bypass any additional equipment that was installed with this system (if applicable).

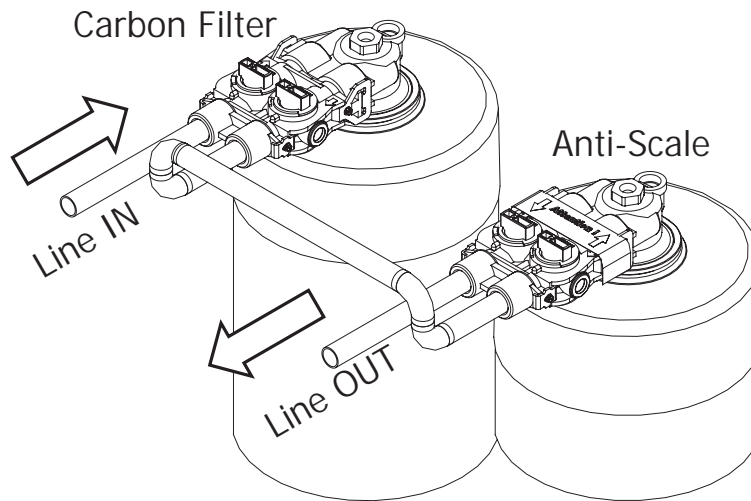
\* Control valve & tank not shown

Figure 1



**Because of UP-flow operation, the correct flow direction is the opposite of the arrows on the bypass valve.**





## System Start Up

### 1. Turn on the Water and Check for Leaks

- Close all faucets that were opened in **Step 5** of the **Installation Instructions**.
- Turn the water back on at the meter or pressure tank.
- Check for leaks. If a leak is present, drain the plumbing again before soldering.

### 2. Flush the System


- Open a cold water faucet and allow water to run for a few minutes or until all foreign material from the installation is washed out; close the faucet.
- Slowly move the bypass valve handles to the service position. The bypass valve handles should be parallel to the pipes.
- Allow water to completely fill the tank.
- To purge any air trapped in the system, open a cold water faucet and allow water to run for at least 2 minutes; close the faucet.
- To flush any remaining hard water from the hot water heater, run hot water in the bathtub until cold; close the faucet.

**The installation is complete and the system is ready for use.**

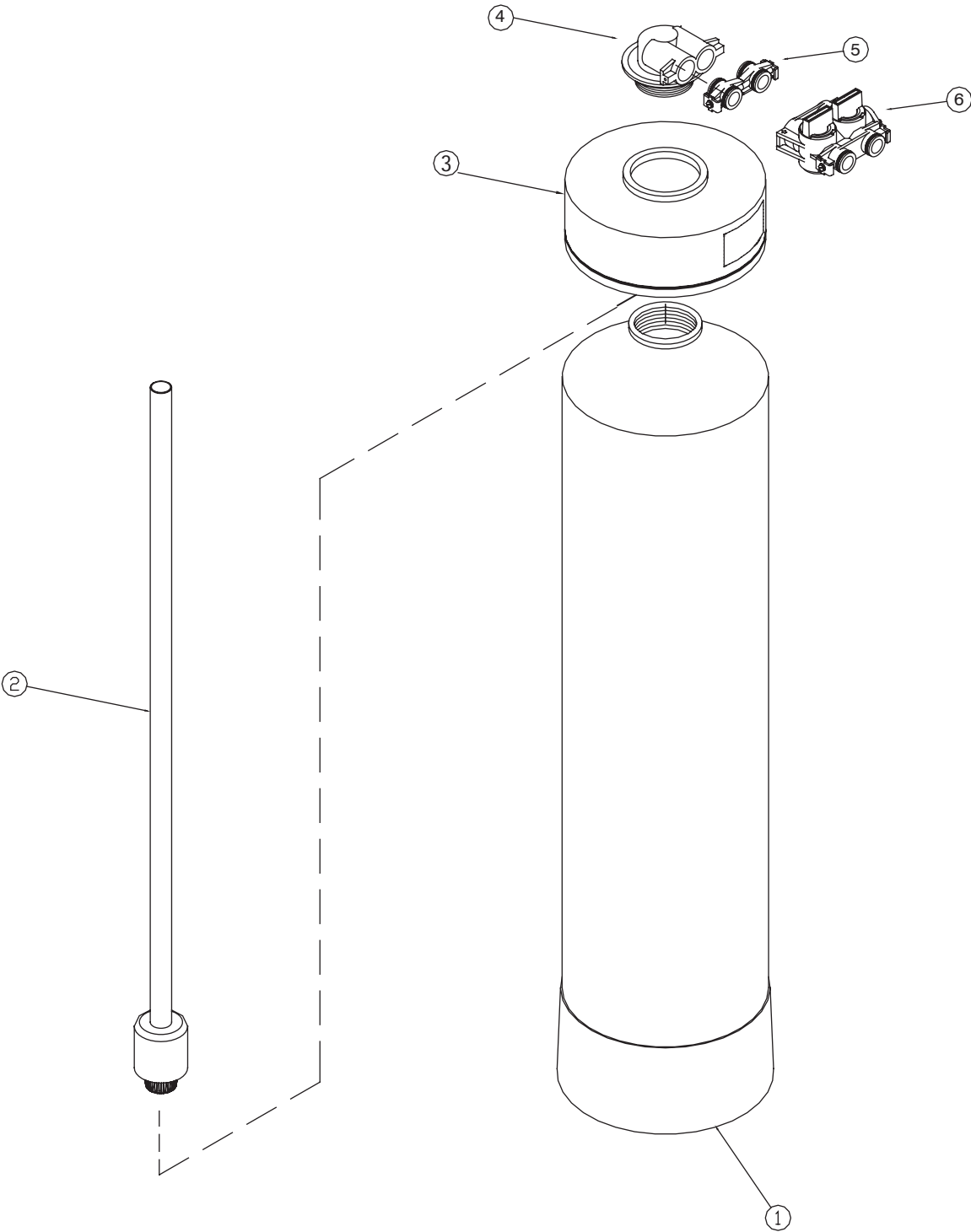
## Maintenance Requirements

### Replacing the Filter Media

The filter media will eventually become exhausted or consumed and will need to be replaced. RainSoft replacement filter media (part number 51501) is available through your local RainSoft Dealer. If you are unable to order replacement parts from your local RainSoft Dealer, please contact RainSoft at 1-800-860-7638 for assistance.

 **Helpful Tip:** We recommend replacing the filter media every three years (or earlier if necessary). Your local RainSoft Dealer can give you specific replacement schedules based on your water usage and incoming water quality.

Exploded View



## Parts List

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	14587 14597	<b>TANK WITH BASE</b> Centurion 844 H Centurion 1054 H
2	1	51504 51506	<b>RISER PIPE ASSEMBLY</b> Centurion 844 H Centurion 1054 H
3	1	19777 19778	<b>TANK COLLAR</b> Centurion 844 H Centurion 1054 H
4	1	19574	<b>COMPOSITE QRS HEAD</b>
5	1	19245	<b>QRS BYPASS ADAPTER</b>
6	1	17557	<b>BYPASS ASSEMBLY</b>

# Troubleshooting Guide

Symptom	Cause	Solution
<b>1. Poor water quality</b>	<ol style="list-style-type: none"><li>1. The raw water has changed.</li><li>2. The filter media may be exhausted.</li></ol>	<ol style="list-style-type: none"><li>1. Call your RainSoft Dealer for a new water analysis.</li><li>2. Call your RainSoft Dealer to replace the filter media (part number 51501).</li></ol>
<b>2. Loss of water pressure</b>	<ol style="list-style-type: none"><li>1. Low pressure to the system.</li></ol>	<ol style="list-style-type: none"><li>1. Bypass the system to confirm the problem.<ul style="list-style-type: none"><li>• If the problem still exists after bypass, it is not related to the RainSoft equipment. Have your water distribution system checked.</li><li>• If the problem is resolved after bypass, contact your RainSoft Dealer for service.</li></ul></li></ol>

**If the troubleshooting guide did not resolve your problem, please contact your local RainSoft Dealer for service. If you cannot locate your local RainSoft Dealer, please contact RainSoft Customer Service at 1-800-860-7638 or logon to [www.rainsoft.com](http://www.rainsoft.com) for the name and location of your nearest authorized Dealer.**

# *Limited Lifetime Warranty*

*For as long as you own the equipment*

RainSoft Division of Aquion Water Treatment Products, believing its

## **RAINSOFT CENTURION**

to be of exceptional quality, hereby warrants said equipment to its first purchaser at retail as follows:

**THE TREATMENT TANK AND VALVE ARE WARRANTED AGAINST DEFECTS IN MANUFACTURE FOR THE LIFETIME OF THE FIRST PURCHASER AT RETAIL.**

**THE FILTER MEDIA IS NOT WARRANTED. THE FILTER MEDIA SERVICE LIFE IS DEPENDENT ON SPECIFIC WATER CONDITIONS AND USAGE.**

This warranty begins at the time the equipment is first connected for use, and is contingent upon the return of a signed owner's registration card.

This warranty does not require replacement of the entire unit. If the equipment does not perform properly, you should request service from the dealer that sold you the equipment. If you are not satisfied, you should notify our Customer Service Manager. If we are not able to arrange local servicing, you should send the defective part(s) (or, if you prefer, send the entire unit,) directly to the manufacturer, freight prepaid, with proof of purchase and a copy of this warranty. The defective part(s) (or entire unit) will either be repaired or new RainSoft part(s) furnished, for a nominal charge to cover labor, handling, packing and the increase, if any, in the retail price of the part(s) since the date of purchase. Genuine RainSoft parts must be used. Failure to use genuine RainSoft parts will void the warranty and certifications.

This warranty does not include labor charges, and does not cover installation, transportation, or any other claims or torts. Some states do not allow the exclusion or limitation of incidental or consequential damages, so parts of the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You also have implied warranty rights. In the event of a problem with warranty service or performance, you may be able to go to a small claims court, a State court, or a Federal District Court.

This warranty is void if equipment is not installed and operated according to instructions. It does not apply to damage caused by abuse, accident, neglect, freezing, fire, or other abnormal conditions beyond the company's control. This warranty is void on any part from which the manufacturing date has been removed or made illegible.

Benefits will be provided by various types of RainSoft equipment when installed and operated according to the manufacturer's recommendations. Operational, maintenance and replacement requirements are essential for the product to perform as advertised. All claims are based on the best available information at the time of printing. Manufacturer makes no representations as to the suitability of this equipment for a particular application. Buyer relies entirely on the dealer's recommendations in the purchase of this equipment.

Independent RainSoft dealers may include, together with your RainSoft product, a product or component that is not manufactured by RainSoft or their parent company, AWTP, LLC. Any non-RainSoft product may be covered by the manufacturer of that product, and is not covered by the RainSoft warranty. AWTP, LLC does not warrant that your RainSoft product and the non-RainSoft product will perform properly when used together, and assumes no liability therefore.

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# NOTES

# NOTES



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